

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/538,784
Applicant : Michael McNiven Rumsey
Confirmation No. : 4306
Filed : June 10, 2005
TC/A.U. : 2611
Examiner : Yu, Lihong
Customer No. : 27896
Docket No. : 0470.0010C (MSK0007-US)
Title : Sample Rate Adaptation in Signal Processing

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to the Notice of Appeal filed herewith and the Amendment After Final Rejection submitted to address the objections to the claims made in the final Office Action dated July 23, 2010, and prior to the filing of an Appeal Brief, Applicant respectfully requests review of the following grounds of rejection:

- Claims 14, 15, 17-21, 23-26, 28, 29 and 31-37 under 35 U.S.C. §103(a) as being unpatentable over Minnis et al. (US 6,954,628; "Minnis") in view of Chester (US 5,717,617); and
- Claim 30 under 35 U.S.C. §103(a) as being unpatentable over Minnis and Chester and further in view of Reisch et al. (US 5,168,375; "Reisch").

In the last paragraph on page 4 of the final Office Action dated July 23, 2010, the Examiner acknowledges that

Minnis does not specifically disclose: (1), using a combination of an interpolator followed by a decimator to alter the sample rate, and (2), the filter performs filtering in the first manner without the adjustments to the sample rate when the receiver is the UMTS receiver.

Regarding the second point, the Examiner argues on page 5 of the final Office Action that

Regarding item (2) above, Minnis has implicitly stated that there is no adjustment to the sample rate when the receiver is in UMTS mode (see Minnis at col. 2, lines 6-15, where Minnis describes that the IF is zero for the UMTS signal).

As noted, support for the Examiner's stated position is indicated to be found at col. 2, lines 6-15 of Minnis, which discusses how "particular design problems are presented by the preferred IF for UMTS being zero....".

While it is correct to state that the use of a non-zero IF would lead to the need of sample rate adjustment, it does not follow (as the Examiner pre-supposes) that the use of zero IF implies that there will not be any sample rate adjustment.

In fact, Minnis clearly states at col. 4 lines 47-50 that

The sigma-delta ADCs 120 quantise the I and the Q components, thereby producing a pair of digital bitstreams. The modulators 120 are clocked at a frequency of approximately 40 times the UMTS chip rate (3.84MHz)

Minnis then states at col. 5 lines 5-7 that

Decimation of the digitized signals also takes place in these filters, reducing the sampling rate to approximately eight times the chip rate.

Accordingly, it is rather clear that, in Minnis, there is indeed sample rate adjustment in UMTS mode in order to bring down the initial sampling rate of 40 times the chip rate down to 8 times the chip rate.

Hence, contrary to what the Examiner is asserting, Minnis does not teach or even implicitly state that, as required by, e.g., claim 14, "the filter performs filtering in the first manner without adjustment to the sample rate when the receiver is the UMTS receiver." In other words, Minnis very clearly describes sample rate adjustment in UMTS mode, whereas the claims of the present application require no adjustment to the sample rate in UMTS mode.

The newly cited Chester reference does not cure this critical deficiency of Minnis.

Consequently, any combination of Minnis and Chester would never result in the claimed invention.

In view of the foregoing, reconsideration and withdrawal of the pending §103(a) rejections of the claims are respectfully requested.

Dated: October 20, 2010

Respectfully submitted by:

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